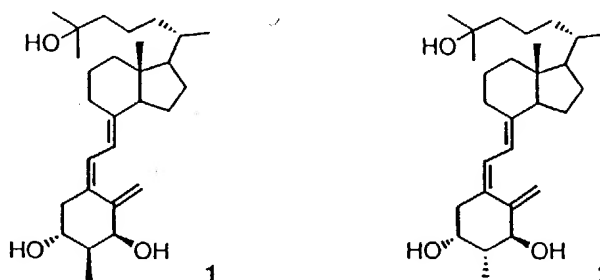


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Active conformations of the A-ring of 1 α ,25-dihydroxyvitamin D₃ is still unclear. In order to investigate the conformation-activity relationship of the A-ring portion, we have synthesized the 2-methyl analogues of 1 α ,25-dihydroxyvitamin D₃, demonstrating that the introduction of the 2-methyl group elevates the affinity to the nuclear receptor (VDR) in some cases. In the present work, we designed and synthesized 2-methyl-20-epi analogues of 1 α ,25-dihydroxyvitamin D₃. The binding affinities of the synthesized compounds were preliminarily tested using the bovine thymus vitamin D receptor. The 2 α -methyl-20-epi analogue (1) exhibited about ten-fold higher potency than 1 α ,25-dihydroxyvitamin D₃, whereas the 2 β -methyl-20-epi analogue (2) had similar activity to 1 α ,25-dihydroxyvitamin D₃.



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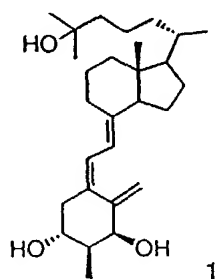
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EXPRESSION OF THE CALBINDIN- $\text{D}_{28\text{K}}$ GENE IS ACCOMPANIED BY
CHANGES IN CHROMATIN STRUCTURE. L. Brown and J. L. Brown
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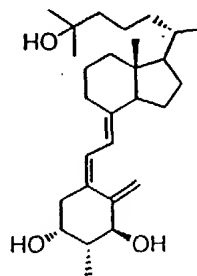
The chromatin structure of the chicken calbindin- $\text{D}_{28\text{K}}$ and flanking DNA was studied in different chicken tissues. Expression of eukaryotic genes is accompanied by changes in the local structural organization of chromatin.

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